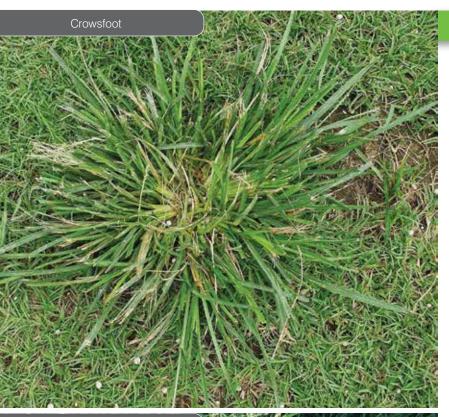
# (ProForce Onset 10GR Herbicide





# **Product Overview**

ProForce Onset 10GR is a granular preemergent herbicide containing the active ingredient Prodiamine (10g/kg). It is registered for the pre-emergent herbicidal control of a broad range of grass weeds including Barnyard Grass, Crabgrass & Summer Grass, Parramatta Grass, Rats Tail Fescue, Crowsfoot, African Love Grass, Bahiagrass, Kentucky Bluegrass, Paspalum and Wintergrass.

ProForce Onset 10GR is registered for use on established turf of the following turf species; Bahiagrass, Buffalo, Carpetgrass, Common Couch, Hybrid Couch, Kikuyu, Queensland Blue Couch, Seashore Paspalum and Zoysia.

Onset 10GR Herbicide is coated on a 200SGN (2mm) dust free, silica granule. The granule contains 26% Plant Available Silicon. Silicon has proven links in abiotic stress management, nutrient uptake improvement and cell wall conditioning, as well as known benefits of increasing turfgrass wear and reducing drought stress.

# **Key Features**

- > Granular formulation convenient, easy to apply and spread, reduced drift and concerns around off target movement.
- > Broad spectrum pre-emergent grass weed control.
- One of the few pre-emergent herbicides registered for the control of Parramatta Grass, Rats Tail Fescue, Paspalum and African Love Grass
- > Strong activity on Crowsfoot, Crabgrass and Summer Grass.
- > Non-scheduled chemistry safer to handle and use in public spaces.
- > Excellent residual performance up to 6 months.
- > Delivers available silicon to the soil. Improves stress management, nutrient uptake, cell wall strength and turfgrass wear.



# Formulated in Australia



Herbicide

SITUATION	TARGET WEEDS	RATE	CRITICAL COMMENTS
Established turf Bahia Grass (Paspalum notatum), Buffalo Grass (Stenotaphrum secundatum),	Barnyard Grass (Echinocloa crus-galli), Crab Grass (Digitaria sanguinalis), Parramatta Grass (Sporobolus africana), Rat's Tail Fescue (Vulpia myuros), Summer Grass (Digitaria sanguinalis)	50-150 kg/ha (500g-1.5kg/ 100m²)	Apply prior to weed emergence in early spring for residual control of up to 6 months. Weed control in turf is most effective when Onset 10GR is activated by at least 6 mm of rainfall or irrigation before weed seeds germinate and within 7 days after application.  A repeat application (3 to 4 months after initial application) may be needed if lower rates are used in high weed pressure situations or during extended germination periods due to environmental conditions.
Carpet Grass (Axonopus affinis, Axonopus compressus), Common Couch (Cynodon dactylon), Hybrid Couch	Crowsfoot Grass (Eleusine indica)		Apply prior to weed emergence in early spring. For residual control of up to 4 months use 50 to 100 kg/ha. For residual control of up to 6 months use 100 to 150 kg/ha. Weed control in turf is most effective when Onset 10GR is activated by at least 6 mm of rainfall or irrigation before weed seeds germinate and within 7 days after application. A repeat application (3 to 4 months after initial application) may be needed if lower rates are used in high weed pressure situations or during extended germination periods due to environmental conditions.
(Cynodon dactylon x Cynodon transvaalensis),			<b>Note:</b> Crowsfoot Grass germinates later than Crab Grass and/or Summer Grass. In situations with multiple weeds present use higher rates to ensure adequate residual control.
Kikuyu (Pennisetum clandestinum), QId Blue Couch (Digitaria didactyla), Seashore Paspalum (Paspalum vaginatun), Zoysia (Zoysia japonica, Zoysia matrella)	African Lovegrass ( <i>Eragrostis</i> curvula), Bahia Grass ( <i>Paspalum</i> notatum), Kentucky Blue Grass ( <i>Poa patensis</i> )	100 to 150 kg/ha (1-1.5kg/ 100m <sup>2</sup> )	Apply prior to weed emergence in early spring. Residual control of up to 6 months. Weed control in turf is most effective when Onset 10GR is activated by at least 6 mm of rainfall or irrigation before weed seeds germinate and within 7 days after application. A repeat application (3 to 4 months after initial application) may be needed if lower rates are used in high weed pressure situations or during extended germination periods due to environmental conditions.
	Paspalum (Paspalum dilitatum)	100-200 kg/ha (1-2kg/100m²)	
	Winter Grass (Poa annua)	50-100 kg/ha	In the absence of emerged <i>Poa annua</i> apply in late summer early autumn.
		(0.5-1kg/ 100m²)	Weed control in turf is most effective when Onset 10GR is activated by at least 6 mm of rainfall or irrigation before weed seeds germinate and within 7 days after application. A repeat application (3 to 4 months after initial application) may be needed if lower rates are used in high weed pressure situations or during extended germination periods due to environmental conditions.
		200 kg/ha (2kg/100m²)	In areas where post-emergent herbicides for <i>Poa annua</i> control may pose a high risk of tracking or off site damage (ie greens surrounds, slopes on high side of greens, etc).
			Apply prior to weed emergence in late summer to early autumn for residual control of up to 6 months. Weed control in turf is most effective when Onset 10GR is activated by at least 6 mm of rainfall or irrigation before weed seeds germinate and within 7 days after application. A repeat application (3 to 4 months after initial application) may be needed in high weed pressure situations or during extended germination periods due to environmental conditions.

### **Mode of Action**

## GROUP 3 HERBICIDE

Prodiamine, the active ingredient in Onset 10GR prevents root growth by blocking plant cell division steps needed for chromosome separation and cell wall formation in the germinating weed seed. As a result of restricted cell division, growth of the emerging weed seedling stops, eventuating in death due to lack of available food reserves. Prodiamine is absorbed through roots and inhibits both root and shoot growth in susceptible weed species. Prodiamine has a high soil binding capacity, staying within the top few centimetres of soil. Selectivity in turf is caused by differences in germination depth of susceptible grass seedlings that absorb the prodiamine in the top layer of soil, compared to the growing points in the turf's roots system that is at a greater depth and is unable to uptake the prodiamine.



